Please accept the following compiled comments from our local HAM radio group in Volusia County, Florida (A. Ryan Williams, Operations Coordinator, Volusia County Emergency Management Agency

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PUBLIC NOTICE

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COMMISSION SEEKS COMMENT ON EMERGENCY COMMUNICATIONS BY AMATEUR

RADIO AND IMPEDIMENTS TO AMATEUR RADIO COMMUNICATIONS

GN Docket No. 12-91

COMMENT DATE: May 17, 2012

1. Importance of emergency Amateur Radio Service communications. As noted above, the statute requires a review of the importance of emergency Amateur Radio Service communications

relating to disasters, severe weather, and other threats to lives and property.

a. What are examples of disasters, severe weather, and other threats to life and property in which the Amateur Radio Service provided communications services that were important to emergency response or disaster relief? Provide examples of the important benefits of these services.

For many years, ham radio operators have responded to various incidents that occurred in Volusia County. They were heavily relied upon during the 1998 wildfires because of limitations with the 800 Mhz system then used by County fire and police services. During the 2004 hurricanes, ham radio operators manned evacuation shelters and provided needed communication.

b. Under what circumstances does the Amateur Radio Service provide advantages over other communications systems in supporting emergency response or disaster relief activities? Under what circumstances does the Amateur Radio Service complement other forms of communications systems for emergency response or disaster relief?

Ham radio operators are often described as the last line of defense or people with specific skills and training that allow them to operate when all else fails, meaning that all other commercial, military and government communications have been compromised by some incident that prevents specific

entities from being able to communicate outside of their neighborhood, city or county. Amateur operators are similar to a backup emergency source that can continue to operate when power has been cut off and towers have come crashing down. With modest equipment, purchased at personal expense, they can keep e-mail traffic flowing, keeping entities connected, and facilitating the process to ensure that outside agencies provide a proper response to a crisis. In other words, outside agencies have no idea of the needs of a particular county or entity until they either establish communication with those cut off or link up physically government officials isolated by a crisis. Although amateur operators may generally not use the same type of equipment or frequency spectrum of civilian and military first responders, unless it is truly a life and death situation, they provide first responders with other communication tools that State and local governments do not necessarily have the funding to invest into.

c. What Federal Government plans, policies, and training programs involving emergency response and disaster relief currently include use of the Amateur Radio Service? What additional plans, policies, and training programs would benefit from the inclusion of Amateur Radio Service operations? How would Amateur Radio Service operations fit into these plans and programs?

If no plans exist, they should. Any plan or policy that ultimately relies upon a communication system that is weakened or destroyed by a natural or man-made disaster should consider making amateur radio a communication component.

d. What State, tribal, and local government plans, policies, and training programs involving emergency response and disaster relief currently include use of the Amateur Radio Service? What additional plans and programs would benefit from the inclusion of Amateur Radio Service operations? How would Amateur Radio Service operations fit into these plans and programs?

Currently, Volusia Amateur Radio Emergency Service (ARES) has a longstanding agreement with the Volusia County Emergency Management to provide ham radio support upon request, regardless of the emergency. The County EOC provides space for ham radio equipment, some of which was bought using Civil Defense funds in the late 1980s, early 1990s. The new County EOC will provide a tower to hold five VHF/UHF antennas and an HF antenna. Dedicated ham radio operators will be able to provide backup communication with neighboring counties and the Florida EOC. Volusia ARES members could also be tasked to man shelters or any critical point, such as ice distribution. The plan spells out the different levels of activation that could occur in if there was a local event, such as plane crash, chemical spill, or railroad accident, or a major event such as a hurricane.

e. What changes to the Commission's emergency communications rules for the Amateur Radio Service (Part 97, Subpart E) would enhance the ability of amateur operators to support emergency and disaster response? In addition, are there any specific changes that could be made to the technical and operational rules for the Amateur Radio Service (Part 97, Subparts B, C, and D) that would enhance the ability of amateur operators to support emergency and disaster response? What other steps could be taken to enhance the voluntary deployment and effectiveness of Amateur Radio Service operators during disasters and emergencies?

During an emergency, amateur radio operators need as much frequency spectrum as possible, not less. In this respect, RACES, as described in Part 97, actually severely limits some of the potential modes that could be used if the President ever invoked the War Powers Act. Fortunately, RACES has never been formally activated.

f. What training from government or other sources is available for Amateur Radio Service operators for emergency and disaster relief communications? How could this training be enhanced? Should national training standards be developed for emergency communications response?

Presently, there is almost no training for amateur radio operators from government other than the Incident Command Structure courses required of all ham radio operators that want to serve the County EMA or other entities such as hospitals. The courses do not target ham radio operators who likely will only operate at the local level as part of Emergency Support Function-2. Otherwise, all training is done by volunteers, and not by the federal or local government. Volusia ARES holds field exercises to familiarize and members with NIMS and ICS forms that have to be modified to be of use to ham radio operators. Not all ICS forms are intuitive, but some are rather complex and were written for other entities. Training is of great value to groups like Volusia ARES. From time to time, some type of training that originates at the federal or county level might help to attract and retain memberships who will feel that they truly have solid connection with the served agency. Otherwise, the served agency can seem remote and members will question why they should devote their time.

- g. What communications capabilities, e.g., voice, video, or data, are available from Amateur Radio Service operators during emergencies and disasters? Are there any future technical innovations that might further improve the Amateur Radio Service?

 h. Are national standards in data transmission needed to enhance the ability of Amateur Radio Service operators to respond to emergencies and disasters? Are there restrictions with regard to transmission speeds that, if removed, would increase the ability of operators to support emergency/disaster response? If so, what issues could arise from
- At this time, there are several modes available to ham radio operators. Besides analog voice, there is digital voice and data modes such as Winlink2000 or D-Star. Currently, operators in the US are not allowed by the FCC to use Pactor 4, which is a standard in Europe and Canada.
- i. Would it enhance emergency response and disaster relief activities if Amateur Radio Service operators were able to interconnect with public safety land mobile radio systems or hospital and health care communications systems? What could be done to enable or enhance such interconnections? What issues could arise from permitting such interconnections?

removing these restrictions?

Ham radio operators could probably be of assistance here if they received training and if served agencies saw value in using operators at these communication junctures.

j. Should there be national certification programs to standardize amateur radio emergency communications training, mobilization, and operations? How would such programs improve emergency communications?

Such a program would be of value if operators were crossing state and possibly even county lines. It would ensure that operators have roughly the same understanding of protocols regardless of where they deployed in the country.

2. Impediments to enhanced Amateur Radio Service communications. The statute also requires that the study identify impediments to enhanced Amateur Radio Service communications and recommendations regarding the removal of such impediments.

a. What private land use restrictions on residential antenna installations have amateur radio operators encountered? What information is available regarding the prevalence of such restrictions? What are the effects of unreasonable and unnecessary restrictions on the

amateur radio community's ability to use the Amateur Radio Service? Specifically, do these restrictions affect the amateur radio community's ability to respond to disasters, severe weather, and other threats to lives and property in the United States? What actions can be taken to minimize the effects of these restrictions? Hacienda Del Rio is a manufactured home community of 726 homes located off of US 1, midway between Edgewater and Oak Hill. There are antenna restrictions in place; however with approval from management some antennas may be erected.

Edgewater Landing is also a large manufactured home community located along US 1 just North of Roberts Road in Edgewater. To the best of my knowledge no antennas may be erected.

Edgewater lakes US 1 between Oak Hill and Edgewater, no antennas

Terre Mar manufactured home community located along US 1 south also between Oak Hill and Edgewater antennas are permitted

<u>Lighthouse Cove a mix stick built/manufactured homes located along US 1 in Oak Hill no</u> antennas permitted.

The vast majority of new subdivisions do not allow outside antennas, one of the largest is Venetian Bay located in New Smyrna Beach

- b. What criteria distinguish "unreasonable or unnecessary" private land use restrictions from reasonable and necessary restrictions? How do local circumstances, such as neighborhood density or historic significance, affect whether a private land use restriction is reasonable or necessary? How does the availability of alternative transmitting locations or power sources affect the reasonableness of a particular private land use restriction?
- c. What steps can amateur radio operators take to minimize the risk that an antenna installation will encounter unreasonable or unnecessary private land use restrictions? For example, what obstacles exist to using a transmitter at a location not subject to such restrictions, or placing an antenna on a structure used by commercial mobile radio service providers or government entities?
- d. Do any Commission rules create impediments to enhanced Amateur Radio Service communications? What are the effects of these rules on the amateur radio community's ability to use the Amateur Radio Service? Do disaster and/or severe weather situations present any special circumstances wherein Commission rules may create impediments that would not otherwise exist in non-disaster situations? What actions can be taken to minimize the effects of these rules?
- e. What other impediments to enhanced Amateur Radio Service communications have amateur radio operators encountered? What are the effects of these impediments on the amateur radio community's ability to use the Amateur Radio Service? Specifically, do these impediments affect the amateur radio community's ability to respond to disasters, severe weather, and other threats to lives and property in the United States? What actions can be taken to minimize the effect of these impediments?
- f. The legislation requires the Commission to identify "impediments to *enhanced* Amateur Radio Service communications."⁷ What specific "enhance[ments]" to Amateur Radio Service communications have been obstructed by the impediments discussed above?